JAVA.UTIL.WEAKHASHMAP CLASS

http://www.tutorialspoint.com/java/util/java_util_weakhashmap.htm

Introduction

The **java.util.WeakHashMap** class is a hashtable-based **Map** implementation with weak keys. An entry in a WeakHashMap will automatically be removed by the garbage collector, when its key is no longer in use. Following are the important points about WeakHashMap:

- Both null values and the null key are supported.
- Like most collection classes, this class is also not synchronized.
- This class is intended primarily for use with key objects whose equals methods test for object identity using the == operator.
- Each key object in a WeakHashMap is stored indirectly as the referent of a weak reference.
- This class is a member of the Java Collections Framework.

Class declaration

Following is the declaration for **java.util.WeakHashMap** class:

```
public class WeakHashMap<K,V>
   extends AbstractMap<K,V>
      implements Map<K,V>
```

Here **<K>** is the type of keys maintained by this map and **<V>** is the type of mapped values.

Class constructors

S.N.	Constructor & Description
1	**WeakHashMap()** This constructor is used to create an empty WeakHashMap with the default initial capacity (16) and load factor (0.75).
2	**WeakHashMap(int initialCapacity)** This constructor is used to create an empty WeakHashMap with the given initial capacity and the default load factor (0.75).
3	**WeakHashMap(int initialCapacity, float loadFactor)** This constructor is used to create an empty WeakHashMap with the given initial capacity and the given load factor.
4	**WeakHashMap(Map<? extends K,? extends V> m)** This constructor is used to create a new WeakHashMap with the same mappings as the specified map.

Class methods

S.N.	Method & Description
1	void clear() This method removes all of the mappings from this map.
2	boolean containsKey(Object key) This method returns true if this map contains a mapping for the specified key.
3	boolean containsValue(Object value) This method returns true if this map maps one or more keys to the specified value.
4	Set<Map.Entry>K,V>> entrySet() This method returns a Set view of the mappings contained in this map.
5	v get(Object key) This method returns the value to which the specified key is mapped, or null if this map contains no mapping for the key.
6	boolean isEmpty() This method returns true if this map contains no key-value mappings.
7	Set<K> keySet() This method returns a Set view of the keys contained in this map.
8	v put(K key, V value) This method associates the specified value with the specified key in this map.
9	void putAll(Map<? extends K,? extends V> m) This method copies all of the mappings from the specified map to this map.
10	v remove(Object key) This method removes the mapping for a key from this weak hash map if it is present.
11	int size() This method returns the number of key-value mappings in this map.
12	Collection<V> values() This method returns a Collection view of the values contained in this map.

Methods inherited

This class inherits methods from the following classes:

- java.util.AbstractMap
- java.lang.Object
- java.util.Map